PTO/SB/08a/b (05-03)
Approved for use through 05/31/2003. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

Substitute for form 1449/PTO

SPECIAL PROPERTY OF THE PROPERTY ŠTATEMENT BY APPLICANT

1

Sheet

(use as many sheets as necessary)

of

3

Application Number	09/717,450
Filing Date	November 20, 2000
First Named Inventor	NEUHOLD and KILLAR
Art Unit	1632
Examiner Name	Michael C. Wilson
Attorney Docket Number	0630/1D532-US2

			U.S. PA	TENT DOCUMENTS	
Examiner	Cite	Document Number	Filing Date	Name of Patentee or	Pages, Columns, Lines, Where
Initials*	No.1	Number-Kind Code ² (if known)	MM-DD-YYYY	Applicant of Cited Document; Class/Subclass	Relevant Passages or Relevant Figures Appear
	1.	5,650,298	06/14/1994	Bujard et al.; 435/69.7	

N PAT	TENT DOCUMENTS				
Cite	Foreign Patent Document Country Code ³ Number 4 Kind Code ³ (if known)	Publication Date	Class/Subclass	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	₩
	WO 95/32285 A2	05/18/1995	C12N 15/12		Ė
3.	WO 92/22333	06/10/1992	A61K 49/00		
<i>f</i> f·	DE 19501032 A	07/18/1996	A61K 38/55		<u> </u>
	Cite No.1 2.	Cite No. 1 Country Code ³ -Number ⁴ -Kind Code ⁵ (if known) 2. WO 95/32285 A2 3. WO 92/22333	Cite No. 1 Foreign Patent Document Publication Date MM-DD-YYYY 2. WO 95/32285 A2 05/18/1995 3. WO 92/22333 06/10/1992	Cite No. 1	Foreign Patent Document Publication Date MM-DD-YYYY Class/Subclass Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. Applicant's unique citation designation number (optional). See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). For Japanese patent documents, the Indication of the year of the reign of the Emperor must precede the application number of the patent document. Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. Applicant is to place a check mark here if English language Translation is attached.

		NON PATENT LITERATURE DOCUMENTS	
Examiner Initials	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T²
/MW/	5.	nauper, Vera, et al., "Biochemical Characterization of Human Collagenase-3", The Journal of Biological Chemistry, 271(3):1544-1550, January 19, 1996	
/MW	6.	Billinghurst, R. Clark, et al., "Enhanced Cleavage of Type II Collagen by Collagenases in Osteoarthritic Articular Cartilage", <i>J. Clin. Invest.</i> , 99(7):1534-1545, April 1997	
/MW/	7.	Mitchell, Peter G., et al., "Cloning, Expression, Osteoarthritic Cartilage", J. Clin. Invest., 97(3):761-768, February 1996	
	8.	(Duplicate)	
/MW/	9.	Liu, Xin, et al., "A Targeted Mutation at the Known Remodeling", The Journal of Cell Biology, 130(1):227-237, July 1995	
/MW	10.	Khokha, Rama, et al., "Utilization of Transgenic Mice in the Study Inhibitors", Cancer and Metastasis Reviews, 14(2):97-111, 1995	
/MW	,11.	No, David, et al., "Ecdysone-Inducible Gene Expression in Mammalian Cells and Transgenic Mice", <i>Proc. Natl. Acad. Sci. USA</i> , 93:3346-3351, April 1996	

(M:\0630\1d532us1\00022863.DOC		Date Considered	·
Signature /Michael Wilson/	·		08/16/2007

PTO/SB/08a/b (05-03)
Approved for use through 05/31/2003. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

- (d)	Under the Paperwor	k Reduction	in Act of 1995, no persons ar	re required to respond to a collection of	finformation unless it displays a valid OMB control number.
. 7	stitute for form 1449/PTO PRMATION DIS	CI O	SIIDE	Application Number	09/717,450
<i>y</i>				Filing Date	November 20, 2000
STA	TEMENT BY A	PPLI	CANT	First Named Inventor	NEUHOLD and KILLAR
İ	(van an many at			Art Unit	1632
	(use as many sheets as necessary)			Examiner Name	Michael C. Wilson
Sheet	2	of	3	Attorney Docket Number	0630/1D532-US2

	16.	Gordon, Jon W., "Tra	nsgenic Animals", International	Review of Cytology,	155:171-229, 1989		
	17.	Jaenisch, Rudolf, "Tr	ansgenic Animals", <i>Scienc</i> e, 240):1468-1474, June 1	0 1988		
	18.	Rossant, J., "Manipul 2:323-334, March, 19	lating The Mouse Genome: Impl 990	ications for Neurobio	ology", Neuron,		
	19.	Weingarten, Harold, et al., "Synthetic Substrates of Vertebrate Collagenase", Biochemistry 24:6730-6734, 1985					
	20. Woessner, Jr., J. Frederick, and Taplin, C.J., "Purification and Properties of a Small Latent Matrix Metalloproteinase of the Rat Uterus", <i>The Journal of Biological Chemistry</i> , 263(14):16918-16925, November 15, 1988						
	21.		et al., "A Novel Coumarin-Labelle ean Biochemical Societies Letter				
	22.		, "Matrix Metalloprteinases Are E the Cell, 6:1287-1303, October		ar Development",		
	23.		d Bujard, H., "Tight Control of G atl. Acad. Sci. USA, 89:5547-555		flammalian		
-+	24.	(Duplicate)					
	25.	D'Armiento, Jeanine, et al., "Collagenase Expression in the Lungs of Transgenic Mice Causes Pulmonary Emphysema", Cell, 71: 995-961, December 11, 1992					
/MW/	26.		al., "Targeted Overexpression of 10245, September 1996	f Bone Formation	", Proc. Natl. Acad.		

PTO/SB/08a/b (05-03)
Approved for use through 05/31/2003. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

INE	ORMATI ATEMEN	ON D	ISCL	OSURE
s _y	TEMEN	T BY	APPL	.ICANT

Substitute for form 1449/PTO

(use as many sheets as necessary)

of

3

3

Sheet

Application Number	09/717,450
Filing Date	November 20, 2000
First Named Inventor	NEUHOLD and KILLAR
Art Unit	1632
Examiner Name	Michael C. Wilson
Attorney Docket Number	0630/1D532-US2

MW/	27.	Overbeek, Paul A., "Transgenic Phenomenology", Transgenic Animal Technology, pp. 96-98
	28.	Robl, James, M., and Heideman, J.K., "Production of Transgenic Rats and Rabbits", Transgenic Animal Technology, pp. 265-270, 1994
	29.	Mullins, Linda J., and Mullins, John J., "Perspectives Series: Molecular Medicine in Genetically Engineered Animals", <i>J. Clin. Invest.</i> , 98(11):S37-S40, 1996
	30.	Shapiro, Steven, D., "Mighty Mice: Transgenic Technology 'Knocks out' Questions of Matrix Metalloproteinase", <i>Matrix Biology</i> , 15:527-533, 1997
	31.	D'Armiento, Jeanine, et al., "Collagenase Expression in Transgenic Mouse Skin Causes Tumorigenesis", <i>Molecular and Cellular Biology</i> , 15(15):5732-5739, Oct. 1995
	32.	Freije, Jose M.P., et al., "Molecular Cloning and Expression of Collagenase-3, a Novel Human Matrix Metalloproteinase Produced by Breast Carcinomas", <i>The Journal of Biological Chemistry</i> , 269(24):16766-16773, June 17, 1994
	33.	Sympson, Carolyn J., et al., "Targeted Expression of Stromelysin-1 Gene Expression", <i>The Journal of Cell Biology</i> , 125(3):681-693, May 1994
	34.	Sanchez-Lopez, Rosana, et al., "Structure-Function Relationships in the Collagenase Family Member Transin", <i>The Journal of Biological Chemistry</i> , 263(24):11892-11900, August 1988
	35.	Kozaci, L. Didem, et al., "Degradation of Type II Collagen, Cultures", Arthritis & Rheumatism, 40(1):164-174, January 1997
	36.	Wall, R.J., "Transgenic Livestock: Progess and Prospects for the Future", <i>Theriogenology</i> , 45:57-68, 1996
/MW/	37.	Ebert, Karl M. et al., "A Moloney MLV-Rat Somatotropin Fusion Gene Produces Biologically Active Somatotropin in a Transgenic Pig", Molecular Endocrinology, pp. 277-282, 1988

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹Applicant's unique citation designation number (optional). ²Applicant is to place a check mark here if English language Translation is attached.

{M:\0630\1d532us1\00022863.DOC	Date Considere	d 08/16/2007
Examiner Signature /Michael Wilson/		

SEP 0 9 ZDD3 RB

PTC/SB/08a/b (05-03)
Approved for use through 05/31/2003. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

	Under the Para tute for form 1449/P				I Information unless it displays a valid OMB control numb
				Application Number	09/717,450
INFO	RMATION D	ISCLO	SURE	Filing Date	November 20, 2000
STAT	STATEMENT BY APPLICANT			First Named Inventor	NEUHOLD
,				Art Unit	1632
	(use as many sheets as necessary)			Examiner Name	Michael C. Wilson
Sheet	3.	of	3	Attorney Docket Number	00630100D532US2

Mir	27.	Overbeek, Paul A., "Transgenic Phenomenology", Transgenic Animal Technology, pp. 96-983	
	28.	Robl, James, M., and Heideman, J.K., "Production of Transgenic Rats and Rabbits", Transgenic Animal Technology, pp. 265-270, 1994	
	29.	Mullins, Linda J., and Mullins, John J., "Perspectives Series: Molecular Medicine in Genetically Engineered Animals", <i>J. Clin. Invest.</i> , 98(11):S37-S40, 1996	
	30.	Shapiro, Steven, D., "Mighty Mice: Transgenic Technology 'Knocks out' Questions of Matrix Metalloproteinase", <i>Matrix Biology</i> , 15:527-533, 1997	
	31.	D'Armiento, Jeanine, et al., "Collagenase Expression in Transgenic Mouse Skin Causes Tumorigenesis", Molecular and Cellular Biology, 15(15):5732-5739, Oct. 1995	
	32.	Freije, Jose M.P., et al., "Molecular Cloning and Expression of Collagenase-3, a Novel Human Matrix Metalloproteinase Produced by Breast Carcinomas", <i>The Journal of Biological Chemistry</i> , 269(24):16766-16773, June 17, 1994	
	33.	Sympson, Carolyn J., et al., "Targeted Expression of Stromelysin-1 Gene Expression", <i>The Journal of Cell Biology</i> , 125(3):681-693, May 1994	
	34.	Sanchez-Lopez, Rosana, et al., "Structure-Function Relationships in the Collagenase Family Member Transin", <i>The Journal of Biological Chemistry</i> , 263(24):11892-11900, August 1988	
	35.	Kozaci, L. Didem, et al., "Degradation of Type II Collagen, Cultures", Arthritis & Rheumatism, 40(1):164-174, January 1997	
	36.	Wall, R.J., "Transgenic Livestock: Progess and Prospects for the Future", <i>Theriogenology</i> , 45:57-68, 1996	
m	37.	Ebert, Karl M. et al., "A Moloney MLV-Rat Somatotropin Fusion Gene Produces Biologically Active Somatotropin in a Transgenic Pig", Molecular Endocrinology, pp. 277-282, 1988	

^{*}EXAMINER: tritial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

(M:\D630\1d532us1\00022863.DQC	Date
	· · · ·
	Considered
Examiner ////	13.45.041
Signature	

^{&#}x27;Applicant's unique citation designation number (optional). *Applicant is to place a check mark here if English language Translation is attached.

FEB 2 8 200 W

FORM PTO-1449

U.S. DEPARTMENT OF COMMERCE PATENT & TRADEMARK OFFICE

SHEET <u>3</u> OF <u>3</u> (REV. 7-80)

LIST OF REFERENCES CITED BY APPLICANT

(Use Several Sheets if Necessary)

DOCKET NO.:

0630/1D532US1

SERIAL NO:

09/717,450

APPLICANT:

Lisa Ann NEUHOLD

FILING DATE:

November 20, 2000

EXAMINER	
INITIALS	
*29. Mullins et al, <i>J. Chin. Investig.</i> , Vol. 98, pages \$37-\$40.	
*30. Shapiro, S. D. Maurix Biol., Vol. 15, pages 527-533.	
AND *31 D'Armiento et al Ma Cel Biol Hol 15 mages 5722-5739	
M)	
32. Freije et al, <i>J. Biol. Chem.</i> , Vol. 269, pages 16766-16773.	
/// *33. Sympson, C. J. et al, <i>Cell Biology</i> , <u>125</u> (3):681-693, May 1994	
*34. Sanchez-Lopez, R. et al, <i>J. Biol. Chem.</i> <u>263</u> (24):11892-11899, Aug. 25, 1988	
*35. Kozaci, L. et al, <i>Arthritis Rheum</i> . <u>40</u> (1):164-174, Jan. 1997	
*36. Wall Theriogenology, Vol. 45, pages 57-88.	
W *37. Ebert et al. Mol Endocrinology, Vol. 2, pages 277-283	
DEFENDENCES NOT CURRILED AS THEY CAN BE FOUND IN SHE WRARDED OF DARENT ARRIVE SERIAL NO. 09/99/ 690	
REFERENCES NOT SUPPLIED AS THEY CAN BE FOUND IN FILE WRAPPER OF PARENT APPLN. SERIAL NO. 08/994,689 FILED DECEMBER 19, 1997.	' •

*EXAMINER:

EXAMINER:

Initial if reference considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

FEB 2 8 2001 LINE OF THE PARTMENT

FORM PTO-1449 U.S. DEPARTMENT OF COMMERCE PATENT & TRADEMARK OFFICE

SHEET <u>2</u> OF <u>3</u>

LIST OF REFERENCES CITED BY APPLICANT

(Use Several Sheets if Necessary)

DOCKET NO.:

0630/1D532US1

SERIAL NO:

09/717,450

APPLICANT:

Lisa Ann NEUHOLD

FILING DATE:

November 20, 2000

*EXAMINER INITIALS

m

*13. Wang et al, Gene Therapy 4:432, 1997

SW

*14. Mattioni et al, Meth. Cell Biol. 43:335, 1994

*15. Watson et al, "The Introduction of Foreign Genes Into Mice," in Recombinant DNA, 2d Ed., W.H.

Freeman & Co., New York, 1992, pp. 255-272.

*16. Gordon, J. W., Int. Rev. Cytol. 115:171, 1989

#17. Jaenisch, *Science* <u>240</u>:1463, 1989

*18. Rossant, *Neuron* <u>2</u>:323, 1990

*19. Weingarten et al, Biochem. 24:6730, 1985

WW *20. Woessner et al, *J. Biol. Chem.* <u>263</u>:16918, 1988

*21. Knight et al, *FEBS* Letts., 2<u>96</u>:263, 1992

*22. Witty, J. P. et al, *Mol. Biol. Of the Cell*, <u>6</u>:1287, Oct. 1995

*23. Gossen et al, *Proc. Natl. Acad. Sci.* USA <u>89</u>:5547, 1992

*24 Shapiro Matrix Biol. 15.527, 1997 PUPLICATE

*25. D'Armiento, J. et al, *Cell*, <u>71</u>:955-961, Dec. 11, 1992

*26. Weir, E.C. et al, *Proc. Natl. Acad. Sci.* USA, <u>93</u>:10240-10245, Sept. 1996

*27 Overbeek P. A "Factors Affecting Transpenic Animal Production," Transgenic Animal Technology

pages 96-98.

*28. Bobl and Heldeman, "Production of Transgenic Rate and rabbits," Transgenic Animal Technology,

pages 265-270.

1.23.02

Wi-